CLAIMS:

1.   A system for controlling the demultiplexing process in an optical backplane device, the optical backplane device including:

5   a modulator means, which is controlled by a modulator control signal and which extracts a selected compressed data packet from a multiplexed stream of compressed packets;

        a monitoring means, wherein the effect of timing errors on decompressed pulse trains is monitored, each decompressed pulse train

10   having a leading edge and a trailing edge; and

        a control signal adjusting means, wherein the timing errors are corrected by adjusting the timing of the modulator control signal.

2.   A system as claimed in Claim 1, wherein the timing of the modulator

15   control signal is continuously adjusted to minimise timing errors.

3.   A system as claimed in Claims 1 or 2, wherein the timing of the modulator control signal is advanced if the trailing edge of a given decompressed pulse train is reduced more than the leading edge of said

20   decompressed pulse train and delayed if the leading edge of the given decompressed pulse train is reduced more than the trailing edge of said decompressed pulse train.

4.   A system as claimed in Claim 3, wherein both the delay and the

25   advance are proportional to the difference in reduction between the leading and trailing edges.

5.   A system as claimed in any one of Claims 1 to 4, wherein the timing of the modulator control signal makes use of calibration pulse trains of known value and suitable form to adjust the timing of modulator control pulses.

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6.   A system as claimed in Claim 5, wherein the timing of the modulator control signal makes use of a calibration pulse train consisting of binary 'ones' only.

10   7.   A system as claimed in Claim 5, wherein the timing of the modulator control signal makes use of a calibration pulse train consisting of a finite repeating sequence of binary 'one' followed by binary 'zero'.

8.   A system substantially as hereinbefore described with reference to
15   the accompanying Figures 1, 2 and 3.